

# DEDHAM SQUARE IMPROVEMENT PROJECT

PROJECT CLOSEOUT

3/20/2014



# Pre-Construction History:

- The design of the project began in 2007.
- Initial public meetings were held in February and June of 2008 to solicit comments on the conceptual design.
- Town Meeting voted to approve funding of the project on May 16, 2011.
- Up until the start of construction, there had been over 40 public meetings to address and solicit comments on most major aspects of the design.
- Up until the start of construction, there had been over 100 internal meetings with various boards, committees, organizations and groups that have been informed, consulted and/or involved in the project.
- The construction contract was awarded to Fed Corp. in January 2012 and construction began on Sunday, March 8, 2012.

# **Public Outreach During Construction:**

The construction of a downtown area creates a significant amount of stress and strain on the businesses, residents, pedestrians and motorists. It was extremely important that the on goings of the project reach all of those concerned. The Town utilized the following tools to reach out to the public to keep them informed and to address their concerns:

- Dedicated Dedham Square Website (Photos, Videos, Schedules, etc.)
- Facebook Page
- Twitter
- Sign-up to receive weekly construction schedule emails
- Dedham Square email to receive and address concerns
- Dedicated phone line to receive and address concerns

## Construction (By The Numbers):

- Construction started on March 8, 2012, was substantially complete on October 8, 2013 and 100% complete November 15, 2013.
- Construction lasted a duration of 592 days (95.8%) out of the 618 consecutive calendar days allotted.
- The contractor worked 176.5 day shifts and 68 night shifts for a total of 244.5 working days (66.8%) out of the maximum 366 working days allowed for the project.
- The contractor was required to work at least 25%, but no more than 50% of the working days at night. At the end of construction, the contractor worked 68 night shifts out of the 244.5 total working days = **28%**.
- The contract provided a \$100,000 incentive to the contractor for finishing the work using less than 75% of the 366 working days allowed. The contractor only needed 244.5 working days which equals **67%**.

## Construction (By The Numbers) continued:

Here are the total amounts of some of the construction materials used as part of the project:

- Bike Racks = **12**
- Ornamental Street Lights = **43**
- Concrete Sidewalks = **6,408.5 Square Yards**
- Vertical Granite Curbing = **8,830 FT (1.67 Miles)**
- Underground Electrical Conduit = **7,264 FT (1.38 Miles)**
- Line Striping Pavement = **17,935 FT (3.40 Miles)**
- Trees & Plantings = **1,510**
- Hot Mix Asphalt = **6,253.63 Tons (12,507,260 Pounds)**
- Bricks = **1,672 Square Yards (66,876 Bricks)**

## Construction (By The Numbers) continued:

The amount of available parking spaces is always a concern in a downtown area. One of the goals of the project was to provide additional parking for Square visitors.

- Pre-Construction On-Street Parking Spaces = 108 Spaces
- Post-Construction On-Street Parking Spaces = 115 Spaces (+7)
  
- Pre-Construction Keystone Lot Parking Spaces = 121 Spaces
- Post-Construction Keystone Lot Parking Spaces = 138 Spaces (+17)
  
- Total increase in available parking spaces = +24 Spaces

Pedestrian safety is also a major concern in downtown areas due to the increased amount of vehicular traffic. One of the project goals for pedestrian safety was to reduce the length of the crosswalks to prevent prolonged exposure of pedestrians crossing the street.

- Pre-Construction Crosswalks Length = 693 Feet
- Post-Construction Crosswalks Length = 494 Feet (-199 Feet)
- Reduction of Time Spent in a Crosswalk = 199 Feet / 3.5 Feet Per Second = **57 Sec**

## Project Budget:

On May 16, 2011, Town Meeting voted to authorize the borrowing of \$6.1 million dollars to construct the Dedham Square Improvement Project with \$4.8 million to be paid locally and the remaining \$1.3 million to be paid through a reimbursement from the State as part of a Public Works Economic Development (PWED) grant awarded to the Town in October 2010. In May 2011, the State awarded the Town an additional \$400,000 to help further offset the cost of construction. This brought the overall budget to \$6.5 million dollars.

The following is a breakdown of the original budget:

## **Project Budget Continued:**

There were a total of 3 Change Orders for this project. Below is a brief description of the change order and the associated cost.

- Change Order #1 included extending the reconstruction of the retaining wall an additional 25 feet and the substitution of the original parking lot lights for ornamental lights identical to the street lights. The cost of the change order was \$118,837.85.
- Change Order #2 included the installation of the utility pole in the Keystone Lot and the application of a liquid sealer on the granite block veneers installed on the High Street retaining wall. The cost of the change order was \$7,632.00.
- Change Order #3 included the early completion bonus of \$100,000, replacing some of the ornamental bollards with steel concrete bollards, installation of an additional street light, installation of a timer installed in the Keystone electrical cabinet and the balancing of quantities not used during the project. The cost of the change order was \$36,497.27.



## Project Budget Continued:

- Along with the 3 construction change orders, the original budgets for resident engineering and police details needed to be increased during the project.
- The Resident Engineering budget was increased by \$18,000 to cover the design and field inspection associated with the expansion of the retaining wall reconstruction as noted in change order #1.
- The Police Details budget was increased by \$30,000. Police detail budgets are usually set at 5% of the construction costs. Due to the sensitive environment in which construction was taking place, additional details were required to ensure the proper amount of safety for was provided for pedestrians and motorists navigating through the construction zone.

# Project Budget Continued:

The Final Budget including the change orders and budget increases was as follows:

• Construction =	\$5,340,980.02
• Police Details =	\$288,720.00
• Resident Engineering =	\$448,000.00
• Contingency =	\$422,299.98
• <b>TOTAL =</b>	<b>\$6,500,000.00</b>

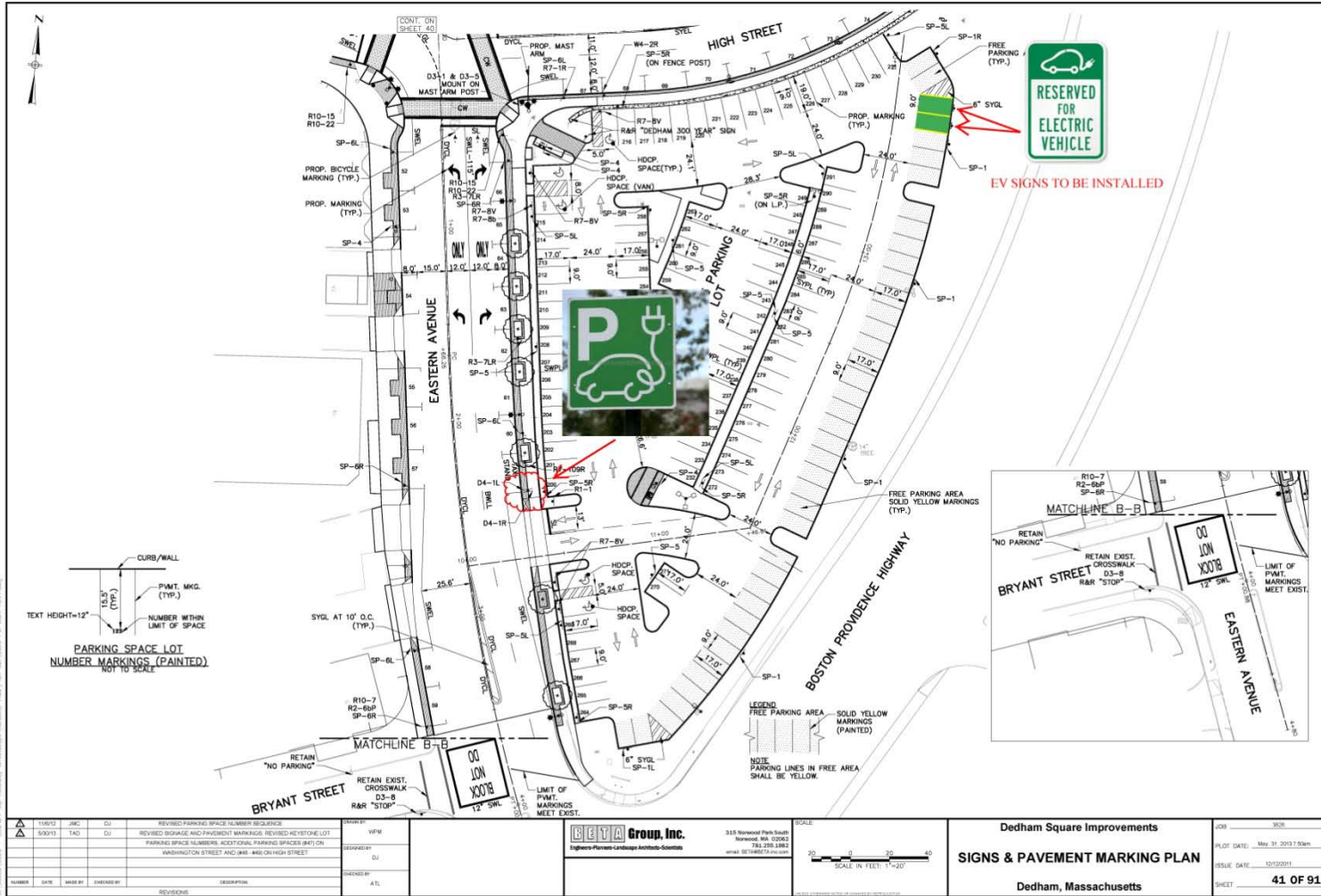
- All of the construction budget has been spent.
- At the end of the project only \$285,597.74 of the police details budget was spent leaving a balance of \$3,122.26 to be placed back into the contingency.
- To date, \$392,959.53 of the resident engineering budget has been spent leaving a balance of \$55,040.47. The engineering consultant still has a few post-construction traffic studies to perform for about \$15,000. Therefore, the remaining \$40,040.47 will be placed back into the contingency.
- The project as completed cost the Town a total of \$6,034,537.29 which is **\$465,462.71 UNDER BUDGET.**

## Additional Project Requests:

- As part of the Dedham Square Improvement Project, an electrical service was installed in the rear of the Keystone Lot for future use by an Electric Vehicle (EV) Charging Station.
- The system was designed to accommodate up to 2 EV charging stations.
- The Town's Environmental Coordinator, Virginia LeClair, took on the task of researching what EV station would work best for Dedham.
- The recommended EV charging station is a ChargePoint CT4021-GW1 from Voltrek, which is a Level II charging station that has the capability of charging 2 vehicles with only one station.
- The EV charging station will charge any type of electric vehicle with the exception of the Tesla EV.
- The charging station has LCD screen that provides support to end users and can be programmed to support Town advertisements.



# Additional Project Requests Continued:



# Additional Project Requests Continued:

- The 2 parking spaces will be painted green and be reserved for electric vehicles only.
- The installation of the foundation, bollards and electrical will be completed by the DPW.
- The cost estimate associated with the EV Charging Station is as follows:



- Equipment, Network Service Plan, Labor, Software, and Service & Maintenance Plan (Provided by Voltrek) = \$12,000
- Foundation Design (BETA) & Construction Materials (DPW) = \$13,000.
- Total Cost Estimate = **\$25,000**

# **Additional Project Requests Continued:**

## **Street Furniture & Landscaping:**

- Now that the project is complete, the reconfiguration of the sidewalks has provided the opportunity for additional street furniture.
- The locations were identified in the Sidewalk Clear Path Plan approved by the BOS on 3/6/14. The locations identified for street furniture required a minimum width of 3.5 feet while still allowing a 6 foot clear pathway on the sidewalk for pedestrians.
- The landscape planters originally selected as part of the project, once installed, did not fit in well with the aesthetics of the Square and were removed. The intention was to reevaluate the Square upon completion to determine what type of planters would look and work best.
- The Dedham Square Improvement Project working group, worked with Amy Black, Sue Hicks and Henri Gough of Dedham Civic Pride, and John Haven a Registered Landscape Architect and member of the Town's Design Review Advisory Board to research and develop what type of street furniture and landscaping planters would best fit the look and feel of Dedham Square. Samples were placed in the Square to see if they would look as envisioned.

# Additional Project Requests Continued:

The Street Furniture selected will consist of the following:

- 4 – 8' Benches (same style that exists in the Square already)

- 32 – 24" Round Tables with 2 Chairs per table



**Fermob's Bistro Collection**

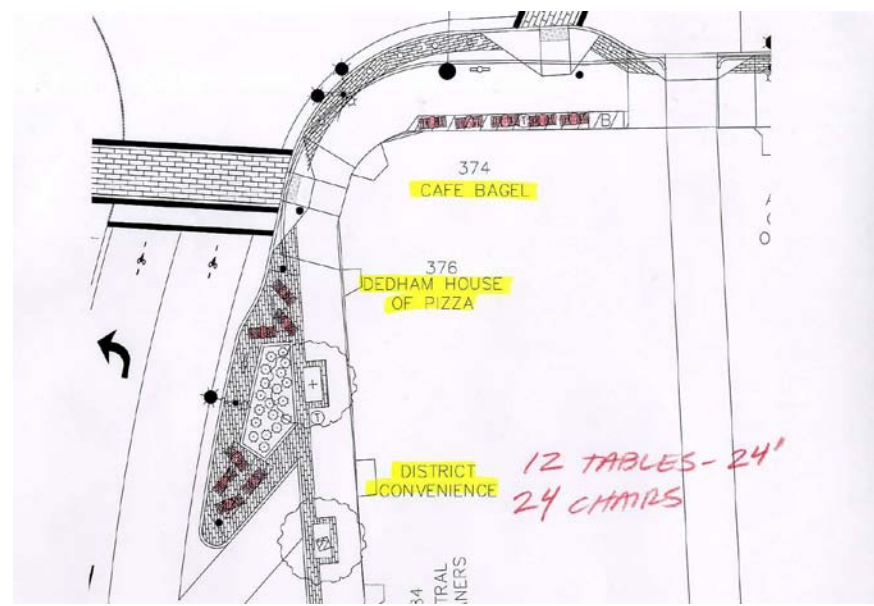
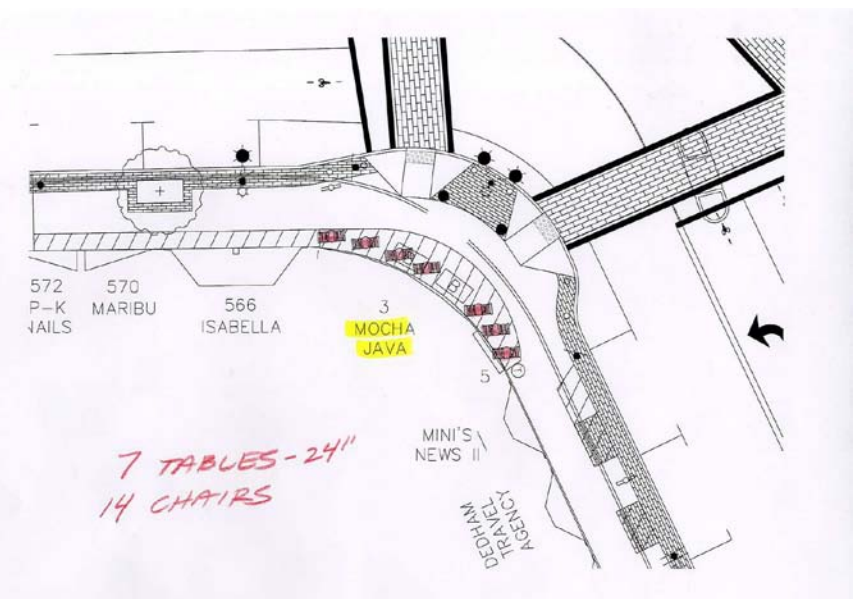
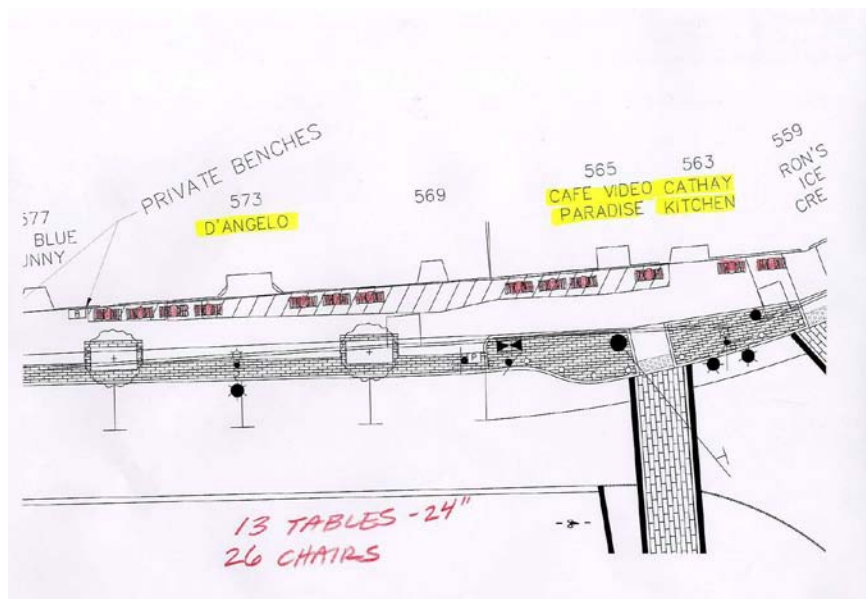
- 19 – 24" Dia. x 27" H Planters
- 12 – 24" Dia. x 18" H Planters
- 5 – 36" Dia. x 24" H Planters
- All Planters to be fitted with Self-Irrigation Systems.



**Tournesol's Downtown Collection**

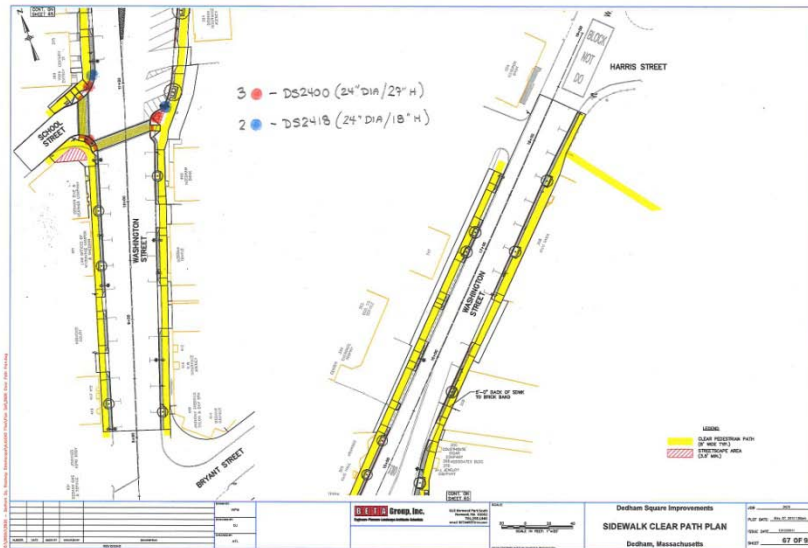
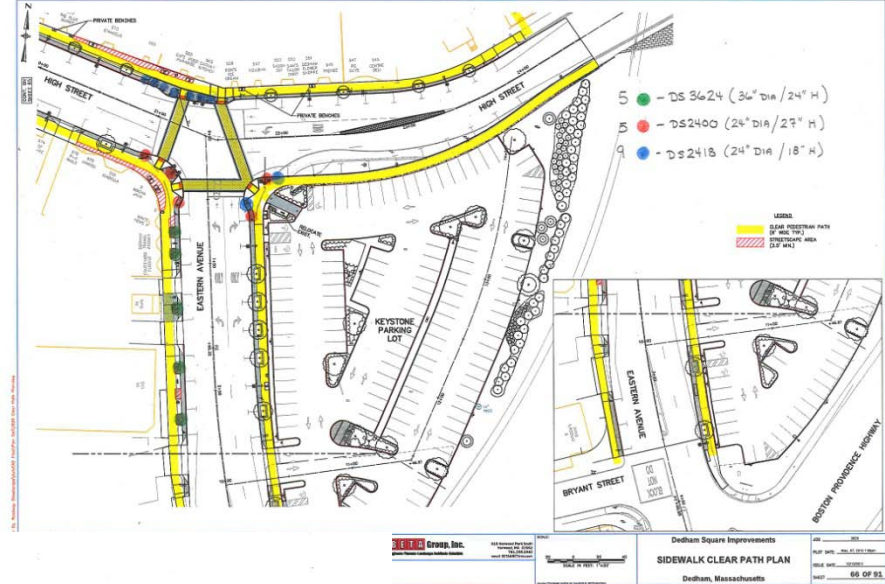
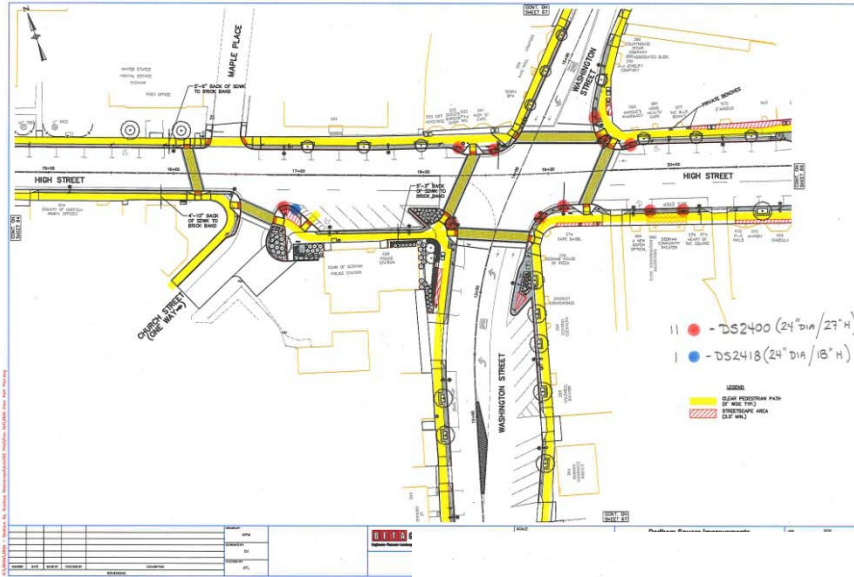


# Proposed Locations for Tables & Chairs :





# Proposed Locations for Landscape Planters :



## Additional Project Requests Continued:

- The purchase of the recommended street furniture is predicated on the desire of the BOS to limit all street furniture to be placed in the Square's Right-of-Way (ROW), within the limits of the project, only to Town purchased furniture. If the BOS desires to continue to allow Businesses to place their own street furniture within the Town's ROW, it is recommended to purchase only half the amount of street furniture to supplement those locations open to street furniture which currently have none.
- The cost estimates for the street furniture and planters are as follows:
  - 36 – Landscape Planters with Irrigation Kits = \$35,000
  - Street Furniture (32 Tables with pair of chairs and 4 benches) = \$15,000
  - Total Cost Estimate = \$50,000 (Town only Furniture)  
\$42,500 (Town supplemented Furniture)

## Closing Remarks:

- Should the BOS approve the requests for the EV Charging Station, Street Furniture and Landscaping Planters, the final cost of the project will be \$6,109,537.29. The project will be **\$390,462.71 UNDER BUDGET.**
- Should the BOS not approve the requests mentioned above, the final cost of the project will be \$6,034,537.29. The project will be **\$465,462.71 UNDER BUDGET.**
- I would like to thank the following groups/people for their support during the project:
  - Dedham Square Improvement Project Working Group
  - Board of Selectmen
  - BETA Group
  - Dedham Civic Pride
  - Dedham DPW
  - Dedham Residents
  - Dedham Square Businesses
  - My Engineering Staff



# QUESTIONS & COMMENTS